

## TRANSPORTATION ELEMENT

Transportation Plans for the Bealeton, Opal and Remington Service Districts are shown on FIGURES 10-BE-1, 10-OP-1 and 10-RE-1 and focus on specific transportation issues as these relate to the service area land uses.

The following section deals with two basic elements, a short-term action plan in Bealeton, and the long-term transportation road network for the three communities.

### 1. Short-Term Action Plan.

#### Route 28/17 Intersection

Technical studies for this Bealeton intersection demonstrate that for the critical AM/PM peak hour traffic this signalized intersection operates at an acceptable Level of Service (LOS) of C in 2001. That level of service is excellent, and requires no immediate improvements.

With a 4 % annual traffic growth rate, this intersection as currently configured would operate at the peak hours with a LOS D in 2010 and LOS F in 2020 (refer to Figure 10-SF-2). Both results are unacceptable for traffic flow, and require road improvements. In 2010, the Route 28/17 intersection needs to have both of the Route 28 approaches widened to four lanes, while the same approaches in 2020 would need to be expanded to six lanes.

#### Oak Shade/Route 28 Intersection

The peak AM/PM traffic in 2001 at this intersection results in an acceptable LOS C rating. No improvements are required. In 2010, Oak Shade Road will require widening of the intersection to allow the addition of a right turn lane, while the intersection will warrant signalization in 2020.

The Plan recommends that VDOT evaluate this intersection and identify safety improvements essential to enhance peak traffic safety. This intersection currently has no northbound left turn lane, and a hillcrest to the south may impede sight distance for vehicles exiting Oak Shade Road.

#### Liberty High School Campus/Route 28 Intersection

No improvements at this intersection are required until 2020. At that time, the Route 28 approaches at this intersection will require the addition of a north and southbound lane. However, consideration needs to be provided for selective shoulder upgrading and culvert modifications to reduce occasional roadway flooding problems.

#### Other Route 28 and 17 Needs and Improvements

##### a. Traffic Speed Enforcement Program.

- Request that the State Police and County Sheriff sustain a campaign of concentrated traffic enforcement of the 45 mph speed limit on Route 28 from the Prince William County line to US Route 15/29.

- To supplement these efforts, the County supports a VDOT request to acquire and schedule a full time “smart” trailer at strategic locations on Route 28. The trailer would flash motorist speeds, but the Plan suggests that VDOT add a computer element that also records speeds. Such records would provide documented trends in vehicle speeds, and indicate the location of effective law enforcement.
- The County will also support a VDOT request to purchase a second “smart” trailer with a computer to record speeds and enforce lowered and safer speed limits on Route 17.
- To further the objective of traffic calming on both Routes 17 and 28 the County will request the Sheriff’s Office to enhance Deputy presence and monitoring of vehicle speeds on these two roads. The County will further request the Virginia Department of Transportation to post speeds through the Bealeton Service District of no more than 40 miles per hour.

b. Special Route 28 Corridor Traffic Study

With increasing traffic volumes and limited state funding for the Route 28 corridor, the County requests VDOT complete a special corridor study as soon as possible. A careful assessment of various fixed objects in the corridor in terms of potential accidents would determine the need to relocate poles or remove trees, which may be within the existing right-of-way. Another technique worth reviewing is the installation of grooved rumble strips either on the edge of the pavement or within the double yellow lines to deter off roadway accidents and/or illegal passing.

c. Right-of-Way Acquisition

VDOT should purchase additional right-of-way, and/or the County should obtain required land through subdivision dedications, for short-term Route 28 improvements. Those improvements should focus on additional left/right turn lanes or possible widening to 4-lanes in specific areas.

d. Grants

The County School Board should seek Virginia Department of Motor Vehicle highway safety and mini grants for school sites located along any state highway.

## **2. Long-Range Transportation Network for Bealeton, Opal and Remington Service Districts**

Bealeton’s existing major roads are both the community’s great asset and great liability. Traffic on Routes 17, 28 and 15/29 is presently growing 3-4% per year. Truck traffic represents 20 percent of this total. In the short term, such growth spurs economic development. Unfortunately, projected traffic counts in the high 50,000 – 70,000 vehicles per day in the year 2020 would compromise growth and reduce mobility within Bealeton as well as within Remington, Midland and Opal.

Intermediate and long-range access plans are shown on the following pages. The intent of these plans is to preserve Bealeton and Remington as distinct, vibrant communities. These

graphics present an intermediate term, at-grade intersection of Route 28/17, with traffic diverted to the south of Bealeton from Route 17 to US 15/29 on a limited access By-Pass. The key purpose of this limited access road is to re-direct regional traffic not needing Bealeton as a destination. The new highway offers an option to resolve the issue of ‘traffic-mixing’ by providing more efficient separation of regional and local traffic. The transportation plan represented here is one that could be expected to take place over a 25 year planning period and more detailed review, planning and engineering phase will be required.

The Plan also proposes to re-direct Route 28 from the intersection with Route 643, Metz Road, to the south of the railroad right-of-way and to Route 805. Route 28 would then generally follow the current alignment of Route 805 to Route 17. The reworked Route 28 transportation corridor would divert regional through-traffic from the Bealeton Service District, and permit conversion of existing Route 17 and 28 within Bealeton to corridors of local business importance. In the first phase, Route 28-805 corridor would be rebuilt as a 2 lane, ‘restricted access’ minor arterial road (access to other roads only) with appropriate left turn holding lanes. In a second phase (between 2020 and 2050) the proposed Bealeton Bypass between Routes 17 and 29 would be extended to the east as a ‘limited access’ road about half way to the Airport, and thereafter be constructed as a four lane minor arterial to Meetze Road. This minor arterial would then link into Route 28 and proceed through Calverton and Catlett on the current alignment. See Figure 10-SF-1 and 10-SF-2.

The plan anticipates funding of these bypasses will be a challenge, and would need to be obtained through multiple sources; for example, through VDOT, private development, and the 98% Federal and State Airport Grant Program – that is assisting the Warrenton/Fauquier County Airport expansion.

Buttressing these arterial road diversions, the Plan proposes to strengthen the local collector road network. James Madison/Route 15/29 business north of Remington and Route 656 south of the town would be improved and re-aligned to permit easier traffic flow with Remington. Bealeton Road/Route 805 would be similarly improved and re-aligned to enhance flow with Midland. A third major collector road would describe an arc extending from Schoolhouse Drive/Route 661 to Weaverville Road/Route 662 and back to Marsh Road/Route 17. Ultimately, this arc would continue to the east and south and connect with Bealeton Road/Route 805.